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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,515	02/04/2002	Steven Lederman	LED001 CON	8409

7590
Carol W. Burton
Suite 1500
1200 17th Street
Denver, CO 80202

04/01/2003

EXAMINER

PRATT, HELEN F

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 04/01/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,515

Applicant(s)

LEDERMAN, STEVEN

Examiner

Hel n F. Pratt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2-7-02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-60 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,235,322. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims encompassed by the patent and do not exclude additional ingredients.

Claim Rejections - 35 USC § 112

Claim 21 -60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 21, 47, 57, 59 are indefinite in the use of the phrase "amorphous structure" because no process steps are given to achieve an amorphous structure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21, 22, 23, 26, 27, 31, 39, 41, 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Saleeb et al.

Saleeb discloses as in claim 21, 26 and 27 making a slurry of fumaric acid and water and a calcium containing aqueous suspension under shear conditions at temperatures not over 160 F. and drying the mixture (abstract and col. 4, lines 16-34). A spray-dried product as in part ii is disclosed. The product is considered to contain solubilized calcium having improved organoleptic properties and enhanced rate of solubilization because the same process is used which would also make for an amorphous structure.

The calcium mixture is incorporated into a beverage such as tea as in claim 22 (col. 7, lines 1-9).

The powder is incorporated into gelatin as in claim 23 (col. 7, lines 24-45).

Vacuum drying, spray, drum oven and with or without vacuum drying the calcium product is disclosed by Saleeb et al. as in claim 31 (col. 3, lines 48-54).

The composition of Saleeb et al. is considered to be fiber-free as in claim 39 (abstract).

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As the method has been disclosed above the product is considered to have been shown as in claim 41.

The product combined with water to make a liquid supplement is disclosed in col. 4, lines 47-55 as in claim 42.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24, 25, 29, 32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Saleeb et al. (5,028,446)

Claim 24 requires solubilizing the dried compound in water. Saleeb et al. disclose adding the composition to water to make a beverage, i. e. solubilizing the compound, which can be a tea drink (claim 25) (col. 7, lines 5-21). Nothing new is seen in packaging the product in a sealed container because beverages in containers are well known. As the method of making the composition has been shown, the product would have had the claimed shelf life of 6 months. The composition is seen to be amorphous, as the process has been shown. Therefore, it would have been obvious to package a product in a container and to make a product with a shelf life of six months.

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Claim 29 requires that the temperature be attained by an exothermic reaction-taking place during acidification of the slurry. Saleeb et al. discloses that the reaction can be exothermic depending on the reactants. When calcium hydroxide is used the reaction is exothermic (col. 6, lines 40-60). Therefore, it would have been obvious to have an exothermic reaction depending on the reactants.

Claim 32 requires that the calcium compound is freeze dried. Saleeb et al. disclose that various means of drying can be used (col. 3, lines 48-54). Certainly, freeze drying is another well known method of drying and nothing new is seen in its use. Therefore, it would have been obvious to freeze dry the product.

Claims 28, 30, 33-38, 40, 43-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Saleeb et al. reference as applied to the above claims, and further in view of Andon (5,468,506) and Keating (5,500,232).

Claim 28 further requires that the aqueous solution attain a temperature of at least 170 F. Andon et al. disclose a process of making a nutritional mineral supplement containing calcium citrate malate by dissolving citric acid and malic acid in water, heating to 131 F. while stirring, then adding calcium carbonate which has been combined with water at a pH of 4.3, and then dried (pages 20, last para. and 21 top. para.). Raising the temperature as in claim 28 is seen as within the skill of the ordinary worker in order to solubilize and saturate the water solution as it is known to heat to at least 131 F. in order to solubilize the mixture. Keating discloses that it is known to heat calcium compounds such as calcium glycerophosphate and calcium hydroxide at no

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heat, 60 and 68 C. and also that the particular acid affects the solubility of the calcium (col. 7, lines 1-11). The heat treatments at 140 F. allowed the calcium to stay in suspension (col. 7, lines 11-17 and col. 8, Table I. Therefore, it would have been obvious to heat the mixture in the process of Andon et al. as Keating discloses that heating of certain calcium compounds improves there solubility (Table 1).

Claim 30 requires using external heat during acidification of the aqueous slurry. Keating discloses that various heating temperatures can be used which implies the use of external heat (col. 6, lines 60-70). Therefore, it would have been obvious to use external sources of heat in the process of the combined references.

Nothing new is seen in adding ingredients at any step of the process as in claim 33, especially as the ingredients are known. Therefore, it would have been obvious to add various ingredients to the composition.

Claim 34 further requires that the process use various acids. Andon discloses the use of citric and malic acids (abstract). Therefor, it would have been obvious to use the claimed acids.

Claim 35 further requires that the dried product is substantially amorphous. The products are seen to be substantially amorphous, as the claimed process has been shown and no other specific limitations are seen as to how to make the product amorphous. The product is further seen to be non-dendritic in morphology as in claim 36 for those reasons cited for claim 35. Therefore, it would have been obvious to make the product as amorphous as shown by the above references and non-dendritic.

Claims 37 and 38 further require particular minerals. Calcium and magnesium are from the same alkaline earth metal group and potassium and zinc are considered to

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be equivalents as to solubility characteristics since they are listed in the same group as calcium and magnesium. Therefore, it would have been obvious to use any one or two of the claimed minerals, as calcium has been shown.

Claim 40 further requires that the aqueous product does not form a precipitate for 6 months. As the process has been shown, it is seen that precipitates would not have been formed for 6 months. Therefore, it would have been obvious to make such a product.

Claim 43 requires the addition of other minerals and claim 44 the addition of sweeteners flavors or colors. Andon discloses the addition of flavors, minerals in the composition. Therefore, it would have been obvious to add other ingredients.

Claim 45 further requires 250 mg of calcium in 8 oz of fluid. Andon discloses that the composition will contain a supplemental amount of from 10 to 300% of the RDA, which is seen to fall within the claimed amount (col. 2, lines 60-70). Therefore, it would have been obvious to provide the claimed amount of calcium in a beverage.

Claim 46 further requires that the supplement remain in solution for at least 6 months. As the process has been shown above in combination, it would have remained in solution for the claimed amount of time.

The limitations of claims 47-60 have been disclosed above and are obvious for those reasons except for the sweeteners of claims 54 and 58. Andon discloses the addition of sweeteners to the composition (col. 12, lines 40-45). Therefore, it would have been obvious to add sweeteners to the composition.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 703-308-1978. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on (703) 308-3959. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651. The examiner's fax number is 703-872-9706.


HELEN PRATT

PRIMARY EXAMINER

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HP 3-28-03